

Title (en)
METHOD FOR SURFACTANT CRYSTAL GROWTH OF A METAL-NONMETAL COMPOUND

Title (de)
VERFAHREN ZUR TENSIDKRISTALLZÜCHTUNG EINER METALL-NICHTMETALL-VERBINDUNG

Title (fr)
PROCÉDÉ DE CROISSANCE CRISTALLINE EN PRÉSENCE D'UN TENSIOACTIF À BASE D'UN COMPOSÉ MÉTALLIQUE/NON-MÉTALLIQUE

Publication
EP 2688847 A1 20140129 (EN)

Application
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Priority
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• IL 2012000103 W 20120304

Abstract (en)
[origin: WO2012120497A1] Method for crystal growth from a surfactant of a metal-nonmetal (MN) compound, including the procedures of providing a seed crystal, introducing atoms of a first metal to contact with the seed crystal thus forming a thin liquid metal wetting layer on a surface of the seed crystal, setting a temperature of the seed crystal below a minimal temperature required for dissolving MN molecules in the wetting layer and above a melting point of the first metal, each one of the MN molecules being formed from an atom of a second metal and an atom of a first nonmetal, introducing the MN molecules which form an MN surfactant monolayer, thereby facilitating a formation of the wetting layer between the MN surfactant monolayer and the surface of the seed crystal, and regulating a thickness of the wetting layer, thereby growing an epitaxial layer of the MN compound on the seed crystal.

IPC 8 full level
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See references of WO 2012120497A1

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